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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|----------------------------|-------------|------------------------|-------------------------|------------------|--|
| 10/811,159 | 03/26/2004 | John Stilianos Agapiou | GP-303796 | 1985 | |
| 7590 11/03/2005 | | | EXAMINER | | |
| General Motors Corporation | | | ROSS, DANA | | |
| Legal Staff Mail Code 482 | -C23-B21 | ART UNIT | PAPER NUMBER | | |
| P.O. Box 300 | | | 3722 | | |
| Detroit, MI 48265-3000 | | | DATE MAILED: 11/03/2005 | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | Applicat | ion No. | Applicant(s) | | | | |
|---|--|-------------------------|---------------------------------|------------------------|--------|--|--|--|
| Office Action Summary | | 10/811,1 | 59 | AGAPIOU ET AL. | | | | |
| | | Examine | r | Art Unit | | | | |
| | | Dana Ro | ss | 3722 | | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | | | | |
| Status | | | | • | | | | |
| 1) 又 | Responsive to communication(s) filed | on <u>26 March 2004</u> | | | | | | |
| • — | • | · | | | | | | |
| 3) 🗌 | Since this application is in condition for allowance except for formal matters, prosecution as to the ments is | | | | | | | |
| | closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | | | |
| Disposition of Claims | | | | | | | | |
| 4)🖂 | 4)⊠ Claim(s) <u>1-14</u> is/are pending in the application. | | | | | | | |
| | 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | | |
| 5) | 5) Claim(s) is/are allowed. | | | | | | | |
| 6)⊠ | D⊠ Claim(s) <u>1-14</u> is/are rejected. | | | | | | | |
| | Claim(s) is/are objected to. | | | | | | | |
| 8)[| 8) Claim(s) are subject to restriction and/or election requirement. | | | | | | | |
| Applicati | on Papers | | | | | | | |
| 9) The specification is objected to by the Examiner. | | | | | | | | |
| 10)⊠ The drawing(s) filed on <u>26 March 2004</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner. | | | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | | | |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | | | |
| Priority ι | ınder 35 U.S.C. § 119 | | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | | | | |
| a) | ☐ All b)☐ Some * c)☐ None of: | ocuments have be | en received | | | | | |
| 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No | | | | | | | | |
| 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage | | | | | | | | |
| application from the International Bureau (PCT Rule 17.2(a)). | | | | | | | | |
| * See the attached detailed Office action for a list of the certified copies not received. | | | | | | | | |
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| Attachment(s) 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) | | | | | | | | |
| | 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) | | | | | | | |
| | mation Disclosure Statement(s) (PTO-1449 or P | ro/sB/08) | 5) Notice of Informal 6) Other: | Patent Application (PT | O-152) | | | |
| Paper No(s)/Mail Date 3/26/04. 6) Other: | | | | | | | | |

Application/Control Number: 10/811,159

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DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 2, 7 and 12 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. It is not clear from the disclosure what Applicant considers to be "vinyl rubber" material.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claims 1-14 are rejected under 35 U.S.C. 102(b) as being anticipated by US Pat. No. 6,109,842 (Cook, hereafter '842).

'842 teaches a standard and V-flanged tapered tool holder 10 with dampening device 38 fitted over the tool holder body between an angular flange surface and the tapered shank (see figure 2, col. 4, lines 24-28, for example); the damping spacer being a ring made of elastic material including either a fibrous material or an elastomeric material "such as rubber" (see col. 4, lines 59-64).

It is noted that '842 discloses the use of an elastomeric material with specific mention of rubber. Examiner further notes that it is well known in the art that polyurethane is used as an elastomer.

In the alternative, regarding claims 2, 7 and 12, in the event Applicant does not agree that the elastomeric rubber material of '842 includes the use of "vinyl rubber", Applicant is referred to the below 35 USC 103 rejection.

In the alternative, regarding claims 3, 8 and 13, in the event Applicant does not agree that the elastomeric material of '842 includes the use of polyurethane, Applicant is referred to the below 35 USC 103 rejection.

5. Claims 1, 2, 5, 6, 7 are rejected under 35 U.S.C. 102(b) as being anticipated by US Pat. No. 6,382,888 (Cook, hereafter '888).

'888 teaches a tapered tool holder 14 with dampening device 28 fitted over the tool holder body between an angular flange surface and the tapered shank and the damping device 36 made of natural or synthetic rubber (see figure 2, col. 3, lines 21-30, for example).

Claim Rejections - 35 USC § 103

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Claims 2, 3, 7, 8, 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over '842 in view of US Pat. No. 3,864,181 (Wolinski et al., hereafter '181).
 - '842 teaches all aspects of the above claims 1, 5 and 10.

'842 teaches the use of elastomeric material for the damping device 38.

'842 does not expressly disclose the use of polyurethane material or vinyl rubber.

'181 teaches it is well know to use any natural or synthetic thermoplastic polymer, specifically polyurethanes (col. 4, lines 1-29) or vinyl mixtures (col 3, lines 59-62, for example) or rubber mixtures (col. 4, lines 4-6, for example) for shock absorption, including the shock absorption in gaskets. It is noted that both vinyl and rubber are polymers.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the material of the generic elastomeric or rubber dampening device as taught by '842 to include the specific polyurethanes and vinyl and rubber material as taught by '181 for the purpose of absorbing mechanical, electrical, thermal and acoustical energy (see '181 col. 1, lines 25-30, for example) therefore ensuring more precision during the machining process.

8. Claims 3 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over '888 in view of US Pat. No. 3,864,181 (Wolinski et al., hereafter '181).

'888 teaches all aspects of the above claims 1 and 5.

'888 teaches the use of natural or synthetic rubber for the damping device 36.

'888 does not expressly disclose the use of polyurethane material.

'181 teaches it is well know to use any natural or synthetic thermoplastic polymer, specifically polyurethanes (col. 4, lines 1-29) or rubber mixtures (col. 4, lines 4-6, for example) for shock absorption, including the shock absorption in gaskets.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the material of the rubber dampening device as taught by '888 to

include the specific polyurethanes and rubber material as taught by '181 for the purpose of absorbing mechanical, electrical, thermal and acoustical energy (see '181 col. 1, lines 25-30, for example) therefore ensuring more precision during the machining process.

9. Claims 4 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over '888 in view of '842.

'888 teaches all aspects of the above claims 1 and 5.

'888 teaches the use of natural or synthetic rubber for the damping device 36.

'888 does not expressly disclose the use of fibrous material.

'842 teaches the use of a damping device 38 with fibrous material.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the damping device as taught by '888 to include the use of fibrous material as taught by '842 for the purpose of preventing slippage between the tool holder and machine tool spindle and therefore ensuring better precision during the machining process.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dana Ross whose telephone number is 571-272-4480. The examiner can normally be reached on Mon-Thurs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer Ashley can be reached on 571-272-4502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dana Ross Examiner

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